

Amendments to the Claims:

Please amend the claims as follows.

1. (Twice amended) A method of treating a gastric acid related disorder in a subject in need thereof, comprising:

providing a solid pharmaceutical composition for oral administration to the subject, the composition comprising consisting essentially of: (a) a therapeutically effective amount of at least one acid labile, substituted benzimidazole H⁺,K⁺-ATPase proton pump inhibitor, and an amount of (b) at least one buffering agent sufficient to increase gastric fluid pH to a pH that prevents acid degradation of at least some of the proton pump inhibitor in the gastric fluid so as to achieve an initial serum concentration of the proton pump inhibitor greater than about 0.1 µg/ml at any time within about 30 minutes after administration of the composition; in an amount of about 0.1 mEq to about 2.5 mEq per mg proton pump inhibitor, and (c) one or more optional pharmaceutically acceptable excipients; and

orally administering the pharmaceutical composition to the subject,

wherein upon oral administration of the pharmaceutical composition to the subject, an initial serum concentration of the proton pump inhibitor greater than about 0.1 µg/ml is obtained at any time within about 30 minutes after administration of the composition.

2. (Previously amended) The method of claim 1, wherein the composition is administered in an amount to achieve an initial serum concentration of the proton pump inhibitor greater than about 0.15 µg/ml at any time within about 30 minutes after administration of the composition.

3. (Cancelled)

4. (Cancelled)

5. (Cancelled)

6. (Cancelled)

7. (Previously cancelled)

8. (Previously amended) The method of claim 1, wherein the pharmaceutical composition is in a form selected from the group consisting of a tablet, capsule, powder, suspension tablet, effervescent tablet or capsule, chewable tablet, granules, pellets, and a liquid created by mixing any of the foregoing with an aqueous medium.

9. (Cancelled)

10. (Previously amended) The method of claim 1, wherein the amount of the proton pump inhibitor absorbed into the serum is therapeutically effective in treating the gastric acid related disorder selected from the group consisting of duodenal ulcer disease, gastric ulcer disease, gastroesophageal reflux disease, erosive esophagitis, poorly responsive symptomatic gastroesophageal reflux disease, pathological gastrointestinal hypersecretory disease, Zollinger Ellison Syndrome, heartburn, esophageal disorder, and acid dyspepsia.

11. (Previously amended) The method of claim 1, wherein the proton pump inhibitor is selected from the group consisting of omeprazole, lansoprazole, rabeprazole, esomeprazole, pantoprazole, pariprazole, and leminoprazole, or an enantiomer, isomer, tautomer, ester, amide, derivative, prodrug, free base, or salt thereof.

12. (Previously amended) The method of claim 1, wherein the amount of the proton pump inhibitor is about 2 mg to about 300 mg.

13. (Previously amended) The method of claim 1, wherein the amount of the proton pump inhibitor is about 10 mg to about 120 mg.

14. (Previously amended) The method of claim 1, wherein the amount of the proton pump inhibitor is about 2 mg, about 5 mg, about 10 mg, about 15 mg, about 20 mg, about 25 mg, about 30 mg, about 35 mg, about 40 mg, about 45 mg, about 50 mg, about 55 mg, about 60 mg, about 65 mg, about 70 mg, about 75 mg, about 80 mg, about 85 mg, about 90 mg, about 95 mg, about 100 mg, about 105 mg, about 110 mg, about 115 mg, or about 120 mg.

15. (Previously cancelled)

16. (Previously cancelled)

17. (Cancelled)

18. (Original) The method of claim 1, wherein the amount of the buffering agent is about 10 mEq to about 70 mEq.

19. (Original) The method of claim 1, wherein the amount of the buffering agent is at least 10 mEq.

20. (Previously amended) The method of claim 1, wherein the amount of the buffering agent is about 15 mEq to about 55 mEq.

21. (Original) The method of claim 1, wherein the buffering agent comprises a combination of calcium carbonate and sodium bicarbonate.

22. (Original) The method of claim 1, wherein the buffering agent comprises a bicarbonate salt of a Group IA metal.

23. (Previously amended) The method of claim 1, wherein the buffering agent is selected from the group consisting of a bicarbonate salt of a Group IA metal, an alkali earth metal buffering agent, a calcium buffering agent, a magnesium buffering agent, an aluminum buffering agent, sodium bicarbonate, potassium bicarbonate, magnesium hydroxide, magnesium lactate, magnesium gluconate, magnesium oxide, magnesium aluminate, magnesium carbonate,

magnesium silicate, magnesium citrate, aluminum hydroxide, aluminum phosphate, aluminum hydroxide/magnesium carbonate, potassium carbonate, potassium citrate, aluminum hydroxide/sodium bicarbonate coprecipitate, aluminum glycinate, aluminum magnesium hydroxide, sodium citrate, sodium tartrate, sodium acetate, sodium carbonate, sodium polyphosphate, potassium polyphosphate, sodium pyrophosphate, sodium dihydrogen phosphate, potassium pyrophosphate, disodium hydrogenphosphate, dipotassium hydrogenphosphate, trisodium phosphate, tripotassium phosphate, potassium metaphosphate, calcium acetate, calcium glycerophosphate, calcium chloride, calcium hydroxide, calcium lactate, calcium carbonate, calcium gluconate, calcium bicarbonate, calcium citrate, calcium phosphate magnesium phosphate, potassium phosphate, sodium phosphate, trihydroxymethylaminomethane, an amino acid, an acid salt of an amino acid, an alkali salt of an amino acid, and combinations of any of the foregoing.

24. (Previously cancelled)

25. (Original) The method of claim 1, wherein the buffering agent comprises sodium bicarbonate.

26. (Previously amended) The method of claim 25, wherein the sodium bicarbonate is in an amount from about 250 mg to about 4000 mg.

27. (Previously amended) The method of claim 25, wherein the sodium bicarbonate is in an amount from about 1000 mg to about 2000 mg.

28. (Previously amended) The method of claim 25, wherein the sodium bicarbonate is in an amount of at least about 400 mg.

29. (Original) The method of claim 1, wherein the buffering agent comprises calcium carbonate.

30. (Original) The method of claim 29, wherein the calcium carbonate is in an amount from about 250 mg to about 4000 mg.

31. (Previously amended) The method of claim 29, wherein the calcium carbonate is in an amount from about 1000 mg to about 2000 mg.

32. (Previously amended) The method of claim 29, wherein the calcium carbonate is in an amount of at least about 400 mg.

33. (Previously cancelled)

34. (Twice amended) The method of claim 1, wherein the ~~composition further comprises at least one of an~~ excipient is selected from the group consisting of: a pharmaceutically compatible carrier, a binder, a suspending agent, a flavoring agent, a sweetening agent, a disintegrant, a flow aid, a lubricant, an adjuvant, a colorant, a diluent, a moistening agent, a preservative, a parietal cell activator, an anti-foaming agent, an antioxidant, a chelating agent, an antifungal agent, an antibacterial agent, ~~or~~ an isotonic agent, and combinations of any of the foregoing.

35. (Twice amended) The method of claim 1, wherein the ~~composition further comprises~~ excipient is one or more flavoring agents comprising selected from the group consisting of aspartame, thaumatin, sucrose, dextrose, ~~or~~ and a chocolate, a cocoa, a cola, a peppermint, a spearmint, a watermelon, an apple, a caramel, a meat, a root beer, a maple, a cherry, a coffee, a mint, a licorice, a nut, a butter, a butterscotch, a butter pecan, or a peanut butter flavoring, and combinations of any of the foregoing.

36. (Original) The method of claim 1, wherein the composition is administered once or twice a day.

75. (Twice amended) A method of treating a gastric acid related disorder in a subject in need thereof, comprising:

orally administering to the subject a single dose of a solution or suspension of a pharmaceutical composition in an oral dosage form for immediate release into an absorption pool having a highly acidic pH, the composition comprising consisting essentially of: (a) a therapeutically effective amount of at least one acid labile, substituted benzimidazole H^+, K^+ -ATPase proton pump inhibitor, and an amount of (b) at least one buffering agent sufficient to increase the pH of the absorption pool of the subject to a pH that prevents acid degradation of at least some of the proton pump inhibitor so as to achieve in an amount of about 0.1 mEq to about 2.5 mEq per mg proton pump inhibitor, and (c) one or more optional pharmaceutically acceptable excipients wherein an initial serum concentration of the proton pump inhibitor greater than about 0.1 $\mu g/ml$ is obtained at any time within about 30 minutes after administration of the composition, and wherein the administering step does not require further administration of the buffering agent(s) beyond that administered in the single dose.

76. (Previously amended) The method of claim 75, wherein the composition is administered in an amount to achieve an initial serum concentration of the proton pump inhibitor greater than about 0.15 $\mu g/ml$ at any time within about 30 minutes after administration of the composition.

77. (Cancelled)

78. (Cancelled)

79. (Cancelled)

80. (Cancelled)

81. (Original) The method of claim 75, wherein the subject is fasting.

82. (Previously amended) The method of claim 75, wherein the pharmaceutical composition is in a form selected from the group consisting of a tablet, capsule, powder, suspension tablet, effervescent tablet or capsule, chewable tablet, granules, pellets, and a liquid created by mixing any of the foregoing with an aqueous medium.

83. (Cancelled)

84. (Previously cancelled)

85. (Previously amended) The method of claim 75, wherein the proton pump inhibitor is selected from the group consisting of omeprazole, lansoprazole, rabeprazole, esomeprazole, pantoprazole, pariprazole, and leminoprazole, or an enantiomer, isomer, tautomer, ester, amide, derivative, prodrug, free base, or salt thereof.

86. (Previously amended) The method of claim 75, wherein the amount of the proton pump inhibitor is about 2 mg to about 300 mg.

87. (Previously amended) The method of claim 75, wherein the amount of the proton pump inhibitor is about 10 mg to about 120 mg.

88. (Previously amended) The method of claim 75, wherein the amount of the proton pump inhibitor is about 2 mg, about 5 mg, about 10 mg, about 15 mg, about 20 mg, about 25 mg, about 30 mg, about 35 mg, about 40 mg, about 45 mg, about 50 mg, about 55 mg, about 60 mg, about 65 mg, about 70 mg, about 75 mg, about 80 mg, about 85 mg, about 90 mg, about 95 mg, about 100 mg, about 105 mg, about 110 mg, about 115 mg, or about 120 mg.

89. (Previously cancelled)

90. (Previously cancelled)

91. (Cancelled)

92. (Original) The method of claim 75, wherein the amount of the buffering agent is about 10 mEq to about 70 mEq.

93. (Original) The method of claim 75, wherein the amount of the buffering agent is at least 10 mEq.

94. (Previously amended) The method of claim 75, wherein the amount of the buffering agent is about 15 mEq to about 55 mEq.

95. (Original) The method of claim 75, wherein the buffering agent comprises a combination of calcium carbonate and sodium bicarbonate.

96. (Original) The method of claim 75, wherein the buffering agent comprises a bicarbonate salt of a Group IA metal.

97. (Previously amended) The method of claim 75, wherein the buffering agent is selected from the group consisting of a bicarbonate salt of a Group IA metal, an alkali earth metal buffering agent, a calcium buffering agent, a magnesium buffering agent, an aluminum buffering agent, sodium bicarbonate, potassium bicarbonate, magnesium hydroxide, magnesium lactate, magnesium gluconate, magnesium oxide, magnesium aluminate, magnesium carbonate, magnesium silicate, magnesium citrate, aluminum hydroxide, aluminum phosphate, aluminum hydroxide/magnesium carbonate, potassium carbonate, potassium citrate, aluminum hydroxide/sodium bicarbonate coprecipitate, aluminum glycinate, aluminum magnesium hydroxide, sodium citrate, sodium tartrate, sodium acetate, sodium carbonate, sodium polyphosphate, sodium dihydrogen phosphate, potassium polyphosphate, sodium pyrophosphate, potassium pyrophosphate, disodium hydrogenphosphate, dipotassium hydrogenphosphate, trisodium phosphate, tripotassium phosphate, potassium metaphosphate, calcium acetate, calcium glycerophosphate, calcium chloride, calcium hydroxide, calcium lactate, calcium

carbonate, calcium gluconate, calcium bicarbonate, calcium citrate, calcium phosphate
magnesium phosphate, potassium phosphate, sodium phosphate,
trihydroxymethylaminomethane, an amino acid, an acid salt of an amino acid, an alkali salt of an
amino acid, and combinations of any of the foregoing.

98. (Previously cancelled)

99. (Original) The method of claim 75, wherein the buffering agent comprises
sodium bicarbonate.

100. (Original) The method of claim 99, wherein the sodium bicarbonate is in an
amount from about 250 mg to about 4000 mg.

101. (Previously amended) The method of claim 99, wherein the sodium bicarbonate
is in an amount from about 1000 mg to about 2000 mg.

102. (Previously amended) The method of claim 99, wherein the sodium bicarbonate
is in an amount of at least about 400 mg.

103. (Original) The method of claim 75, wherein the buffering agent comprises
calcium carbonate.

104. (Original) The method of claim 103, wherein the calcium carbonate is in an
amount from about 250 mg to about 4000 mg.

105. (Previously amended) The method of claim 103, wherein the calcium carbonate
is in an amount from about 1000 mg to about 2000 mg.

106. (Previously amended) The method of claim 103, wherein the calcium carbonate
is in an amount of at least about 400 mg.

107. (Previously cancelled)

108. (Twice amended) The method of claim 75, wherein the ~~composition further comprises at least one of an~~ excipient is selected from the group consisting of; a pharmaceutically compatible carrier, a binder, a suspending agent, a flavoring agent, a sweetening agent, a disintegrant, a flow aid, a lubricant, an adjuvant, a colorant, a diluent, a moistening agent, a preservative, a parietal cell activator, an anti-foaming agent, an antioxidant, a chelating agent, an antifungal agent, an antibacterial agent, ~~or~~ an isotonic agent, and combinations of any of the foregoing.

109. (Original) The method of claim 75, wherein the subject is an adult human.

110. (Previously amended) The method of claim 75, wherein the disorder is selected from the group consisting of duodenal ulcer disease, gastric ulcer disease, gastroesophageal reflux disease, erosive esophagitis, poorly responsive symptomatic gastroesophageal reflux disease, pathological gastrointestinal hypersecretory disease, Zollinger Ellison Syndrome, heartburn, esophageal disorder, and acid dyspepsia.

111. (Twice amended) The method of claim 75, wherein the ~~composition further comprises~~ excipient is one or more flavoring agents comprising selected from the group consisting of aspartame, thaumatin, sucrose, dextrose, ~~or~~ and a chocolate, a cocoa, a cola, a peppermint, a spearmint, a watermelon, an apple, a caramel, a meat, a root beer, a maple, a cherry, a coffee, a mint, a licorice, a nut, a butter, a butterscotch, a butter pecan, or a peanut butter flavoring, and combinations of any of the foregoing.

112. (Original) The method of claim 75, wherein the composition is administered once or twice a day.